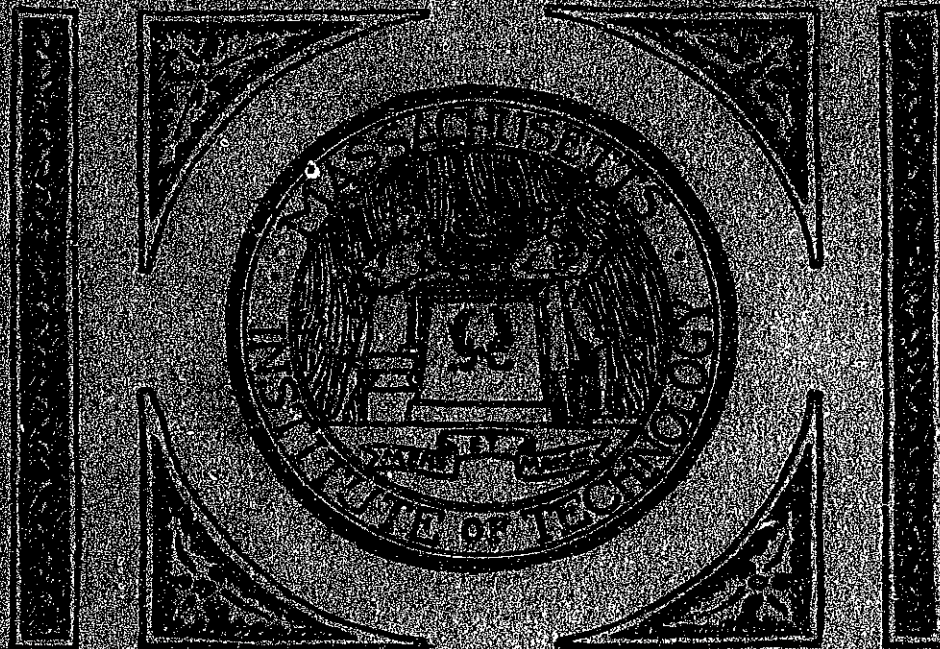


# THE TECH



VOL. XXIII

NO. 10

DEC. 10, 1903



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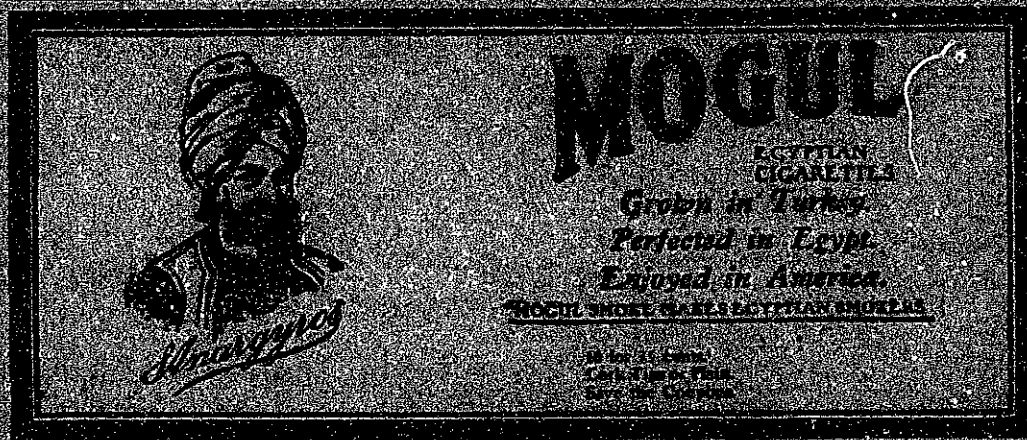
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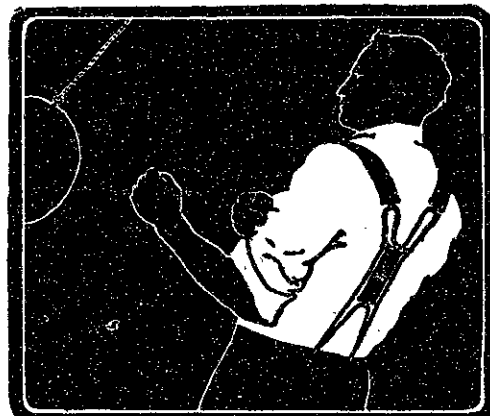
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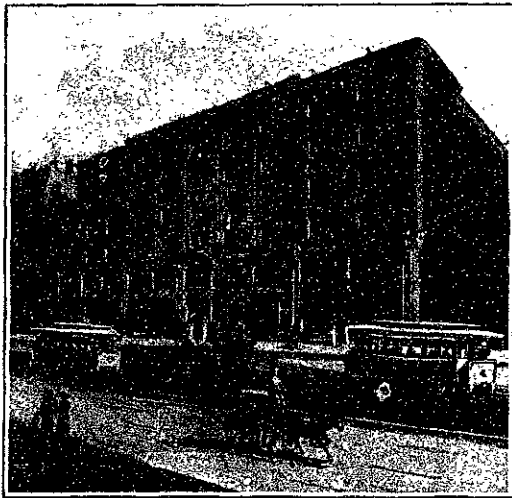


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# THE TECH

VOL. XXIII.

BOSTON, DECEMBER 10, 1903.

NO. 10.

## THE TECH

Published every Thursday, during the college year, by students of the Massachusetts Institute of Technology.

GRAFTON B. PERKINS, 1905, *Editor-in-Chief*.  
LEONARD T. BUSHNELL, 1905, *Managing Editor*.  
H. EVERETT DARLING, 1906, *Secretary*.  
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Editor-in-Chief . . . . . Daily, 8.30-9 A.M.  
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*For the benefit of students THE TECH will be pleased to answer all questions and obtain all possible information pertaining to any department of the College.*

*Contributions are requested from all undergraduates, alumni, and officers of instruction. No anonymous manuscript can be accepted.*

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## TRADITIONS.

WHEN Mr. Bullard, at the Field Day dinner, urged the men to start a series of traditions for Tech, many deemed it impossible, a dream which might come true elsewhere, but not here. This is strictly false. Every college tradition has a small beginning; some are natural growths, some are forced to grow. The second is the form which we have to establish. No man now in the Institute can hope to see any "tradition" started now develop into a lusty, important factor in our life while still

here. One can not deny that these customs, no matter how foolish they seem to an outside observer, bind men into closer connection with their college and with one another. Already we have a few of these traditions: there is the rush for the first volumes of *Technique*, the gathering of the Seniors on Rogers steps to see the old year out and the new year in, and we may even include the rising, as the president of the Institute takes the platform to address the students. We need more such things and they are within our power to supply. If, this year, a committee of Seniors and Juniors should plan half a dozen little happenings which might recur each year, and have the ceremonies, if they be such, acted out with more or less publicity, it is not beyond belief that one or more of these would become permanent. They could not be time-honored in a year, but a tradition must start, and now is always better than to-morrow. To the Institute Committee or to the two upper classes we must look for final action, but to start matters along we will gladly publish any plan presented to us in the form of a signed communication and will do anything further to promote the scheme which lies in our power.

## A SUGGESTION.

THE debates given in connection with Professor Pearson's Course in Argumentation bring to our attention the fact that among the numerous interests at Tech there is no Debating Club. An attempt was made by members of the class of 1905 during their Freshman year to in-

augurate a "forum," but owing to lack of support it was unsuccessful. President Pritchett in an article in the last Junior Week issue of THE TECH draws attention to the desirability of a "somewhat informal Debating Club, to be called the Tech Forum," whose proceedings shall be part of the Saturday evening meetings at the Union. Beyond this attempt and Dr. Pritchett's suggestion, nothing has been attempted at the Institute.

There is no doubt that a public forum would be of inestimable benefit to the student body, and highly desirable as a part of Tech life. The ability to express one's opinion, extemporaneously or after preparation, on matters of local or public interest, or in fact on any question, is an accomplishment which few men have. This "art of conversation" which Dr. Pritchett so strongly emphasizes, is a necessary part of an engineer's training, but unfortunately it has been neglected to give way to technical training. But of what avail is the engineer's technical skill if he cannot express his ideas in a concise, intelligent way to a party of capitalists or others interested in engineering enterprises? The doctrine of "flexibility of mind" might well be dilated upon here, but it is unnecessary. The fact remains that few men can stand up and give a straightforward talk on a subject, and if we can develop this accomplishment by means of a forum, it is our duty to do so at once in the most practical way. As Dr. Pritchett expressed it, "Why might not some class make its own name famous by taking up the idea of the Tech Forum and putting it into operation?"

#### OUR EXCHANGES.

THE large number of men at Tech who have at some time been connected with other colleges warrants the enlarging of our exchange list to include the leading papers of every important American college. Some of them are hard to reach

and the process will take time, but during the interval we will try to have on file in the General Library any college paper which a student may ask for. A signed note left at the "Cage" for the Secretary of the Board will insure the receipt by the desired paper of a copy of the next TECH, and if we receive their exchange the copies will be placed on file with the others, and if not, the fault is not ours. It is not only our pleasure but our duty to keep up this branch of our work, so the men need not hesitate to avail themselves of this offer, for we are not granting them a favor as much as they are doing one for us.

#### THE LOCAL CLUBS.

THE activity of several of the clubs made up of men from certain localities, notably the Wisconsin and the Missouri Clubs, point out the lack of such clubs here. Why is there no New York Club and no Philadelphia Club? There is always a field for such an organization; probably fifteen states have enough men here to make for each a respectable society, a third of the towns in eastern Massachusetts can say the same, and there is hardly a county in this state which has less than eight or ten men at Tech. Do these clubs pay to form? Ask any member of the already existing ones. Their formation is only a question of a bit of push on the part of one or two men, and every one connected will be the gainer by it. There can not be too many of these clubs, be they state, town, or school.

#### Senior Portfolio.

The following men have been nominated for the Senior Portfolio Committee: W. W. Cronin, E. Harrah, C. B. Williams, G. W. Eastman, G. H. Powell, A. Kemper, W. E. Hadley, R. Hazeltine, R. Faulkner, G. C. Riddell, A. C. Willard, A. M. Holcombe, E. T. Wood, C. R. Haynes, W. L. Cronin, B. Blum, W. A. Wentworth.



### The Field Day Dinner.

The annual dinner given by the Advisory Council to the participants in Field Day was held at the Union on Dec. 1, one hundred and sixteen plates being laid. Besides the teams of both classes, the judges and the marshals, Dr. Pritchett, Dean Burton, Mr. Rand, the Advisory Council, Mr. Bullard, and others interested in Tech work were present to help make the evening joyful. During the dinner Chairman Briggs introduced Mr. Bullard, who started a course of instruction in the Songbook, which he continued at intervals throughout the whole evening. Mr. Bullard urged the faster singing of the songs, and also that the men adopt certain of them as special favorites, about which customs would grow up.

Dr. Pritchett gave an outline of his observations at Charlottenburg and later told of the German "Kommers" system. He referred to the dinner as a type of the present Tech affair, which, he said, cannot be duplicated in America.

Dean Burton's speech was limited by the effects of a bad cold, but before his voice became exhausted he managed to advocate the introduction of a sack race or some other fun-making feature into Field Day.

Mr. Rand said he had but one speech, and that was "Pay! Pay! Pay!" but his dryly funny talk ended up with a story which seemed to tickle his audience, and to make them wish that he had aired the large stock with which Mr. Briggs credited him.

The loving cup was passed around, and the prominent men received ovations as they gave their names and classes. Dr. Pritchett laid claim to the Class of 1904, and Coach Mahan said he was from 1905, both of which statements called for unlimited cheers. The Sophomores started the noise with a ringing 1906 yell, followed later by the Freshmen, the Juniors and the Seniors.

Chairman Briggs spoke on the history of our athletics, of how football had become too much of a business for the Institute, and of the failure of the students to lend support to baseball. Therefore, he said, track athletics are the only ones open for us, and we have shown what we can do in them. With our cross country team, which has just won from Amherst, with the men from the two relay teams, with the old men and such new ones as may come out, our track team should show up well in the spring meets. On May 7 we are to meet Dartmouth in Boston, on the 14th the team will go out to Amherst, and on the 21st the Worcester meet will be held. Last year the track squad started in with a hundred men, this year that number ought to be doubled.

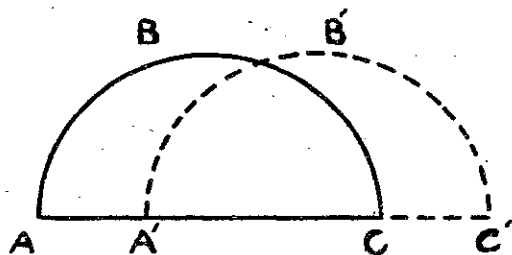
### Basket Ball Team.

For the last four weeks the candidates for the Basket Ball Team have been practicing faithfully at the Gym. This year has witnessed a marked change in basket ball at Tech. Heretofore seven or eight men have come out every year for the team. This year at least twenty-five have appeared at every practice, and Coach Mahan and Captain Schonthal both feel confident that from the material available a very fast team will be developed. Up to the present, practice has been held on Tuesday, Thursday and Saturday afternoons, but since indoor work for the track team has begun, practices are held on Wednesday and Friday evenings at 7 and Saturday afternoons at 2 P.M.

At present the make-up of the team is as follows: Forwards, Blake and Mathison; centre, Moffat or Burleigh; guards, Ager and Schonthal (captain). This make-up, however, is still subject to change. Competition for the different places is very keen, and consequently no man is absolutely certain of holding his position.

### The Survival of The Strongest.

There is perhaps no thought more prominent in the history of the world than the Survival of the Strongest. The stronger nations survive and dictate the policies of the weaker. Centuries ago a Babylon ruled the then known world, as did later a Rome. That which is true of nations is true also of the individual. We all admire the successful contestant in a physical or mental trial. Contests are the principal recreations of the college. This contest becomes a continuous struggle as soon as college days are past. It is here, of course, almost entirely a mental one. In the brute world about us it is, on the other hand, almost completely a physical one. It is the stronger which survives whether considered physically or mentally. Why should this be so?



In the life curve represented by A B C, let A represent a weak animal, and C a strong one. Of their offspring a few will be as weak, and a few weaker than A; a few will be as strong, and a few stronger than C. The weak ones will be the first to perish in the competition which ensues upon a scarcity of food, as the strong will get all of it. Or during an epidemic disease they will be the first to succumb. Hence, as the ones at the A end of the curve have died and those stronger than C have survived, the curve will advance to A' B' C', *i. e.*, to the strong end. And thus it will continue advancing with each succeeding generation. Now let C in the curve above represent a fish with a slightly better fin, or a stronger skeleton, or a larger brain than A. In competition such will survive and transmit to a few of their descendants a little more of that which enabled them to compete so successfully. The curve thus progresses to the strong side; and so with any character of any other animal.

But this curve will branch in all directions according to the necessities of environment. Every class

of animals will spread in all directions where food may be obtained. For instance, certain species of worms burrow in the earth, living mainly upon vegetable mold; others build tubes in which they live — some in salt water, others in fresh; these catch such food as floats by them. Others are free swimmers, active and predaceous. As the environment of these different species differ, so necessarily will their manner of development; that is, other things being equal, those earth worms will survive that can dig the swiftest, those tube-livers that build the strongest tubes; but the active ones will evolve the most rapidly.

However, another factor seems to enter into evolution: When a class or a genus begins to develop in a certain direction, due to environment, they frequently continue developing in that direction even when environment has become unfavorable. For example, the sabre-toothed tiger, which lived in North and South America as well as in Europe ages ago during the Tertiary era, developed its tusks (whence its name) to an enormous degree. But instead of ceasing growth at a certain size, as for the welfare of the animal it seems they should have done, they kept getting larger and larger in succeeding generations until only with difficulty, evidently, could the tiger get food into its mouth, and the race probably died of starvation.

Turning again to our life curve we see that continuing the development in any one direction long enough we will have an animal totally unlike the ones with which we started, but that each succeeding generation differs imperceptibly from the preceding. In time there would be developed distinct species, genera and classes, but a line dividing them would necessarily be an arbitrary one, as they would grade one into the other. This we find to be the case. In the study of ancient life, especially the shells, we get many series where a division into species is entirely arbitrary, and merely one of convenience, as we have all the connecting links in the evolutionary succession.

Let us then take a rapid glance over the classes of the animal kingdom, with especial reference to their succession in time upon the earth.

Owing to the very great age of the oldest sedimentary rocks and the consequent alteration they have undergone, the organic remains thus far found in them are wholly unsatisfactory. In the earliest

rocks (Cambrian) which are well enough preserved to yield animal forms in a satisfactory state of preservation, all the lower classes are represented (*i. e.*, Protozoa, Cœlenterates, Vermes, Molluscs, and Crustacea). The rulers of the seas at that time—there was no land life—were huge nautilus-like animals and crabs (molluscs and crustacea). These continued to be the rulers until forced into a subordinate position by the fish in the Devonian age. The competition in the seas at this time evidently became so great that some animals were forced upon land to survive, for land-living crustacea and insects are found in the rocks of this age. In the succeeding age (Carboniferous) Amphibia (frogs, etc.), was the most highly developed class. This is one step in advance of fish. By remains in rocks of a later age, the Mesozoic, we find that a distinctly higher class of vertebrate animals had come into existence—the reptiles. Competition among them was exceedingly severe, for they spread all over the land, then into the seas, and finally into the air, so that they ruled the earth, air and water. The progress of the life curve among them was in the direction of size, for among them were the largest animals that ever lived on our planet—sixty to eighty feet long, and fifteen to twenty-five feet high. But the brains of the huge individuals at the close of this time were scarcely larger than those of the relatively small animal at the beginning of it. Towards the close of the Mesozoic era a class of small animals (mammals) appeared. These began a rapid evolution in brain development, and doubtless had much to do with the extermination of the dominant reptile class. These became the ruling class in the next era (Tertiary). Some of them made the same mistake that their ancestors, the reptiles, made, that of increasing the size of a body without a corresponding increase of brain, and suffered the same penalty, extermination. The main stem of the mammals, however, developed brain and body both and the result is seen in the mammals of the next age (the present), as represented by the lion, the deer, the horse, and finally, man.

The reign of each class ends, but not to perish; it is merely subordinated to the higher. Thus, as we glance back over the upward march of evolution we see not only that the stronger survived, but that might and right are synonymous terms. The stronger rules, not by neglecting the characters

which made the lower classes great, but by adding new powers to the best of these. The lower Cœlenterates could feel and perhaps taste. The higher worm retained these qualities, but could also see and move actively. The higher vertebrate much increased the brain power, and hence with them cunning counts for more than mere brute strength. In man, brain (mentality) becomes the dominant factor; he, however, retains touch, taste and sight, but they are subordinate to the mind. Thus the animal has progressed, not by crushing out the lower characters, but by subordinating them to the higher; just as each class of animals still exist, but in a position subordinate to the highest. Hence man's first duty is to be a good animal (not a beast); that is the oldest portion of his nature; it is that on which he still depends for further evolution. Touch, taste and sight are three of the oldest factors in the evolution of the animal kingdom; they are three of the steps by which we have mounted and they are necessary to our continuance here; but he who descends and spends his life upon those steps has renounced his humanity and is lower than the beasts; he has slipped back millions of years in his evolution, and has become an invertebrate, a Cœlenterate or a worm.

A man without good physical health is but a partial man and cannot expect to succeed in the competition amid which he is placed. He is on the weak end of the life curve. Two men, however, may enter life together; A with a fine physique, B a puny individual. A may spend his energy so lavishly that he may be bankrupt (dead) before he is thirty years old. B may husband his so carefully and continually add to it that at thirty he is comparatively a robust man.

One man may develop the brain at the expense of the body and at a critical moment breaks down. Another develop the body without a corresponding development of the brain and is crowded out in the competition. Another may develop both brain and body, but spends his energy with too lavish a hand. All are at the weak end of the life curve. These are some of the reasons why one man succeeds where another fails. Man cannot neglect his body at the expense of the mind, nor neglect his mind at the expense of the body. He must be completely sound, with the weaker part as strong as the rest, like the "Deacon's One Hoss Shay;" otherwise at a critical moment in the race an organ gives way and the race is lost.

H. W. SHIMER.

## Calendar.

## THURSDAY, DECEMBER 10.

- 4-15 P.M. GYMNASIUM CONTEST. Running High Jump. One point for each inch over four feet six inches.
- 4-30 P.M. GEOLOGY LECTURE. Second of the series being given by Dean Shaler.

## FRIDAY, DECEMBER 11.

- 8 P.M. TECH vs. HARVARD. Chess match at the Harvard Union.

## SATURDAY, DECEMBER 12.

- 1-40 P.M. HARE AND HOUNDS RUN. Leave North Station for Melrose.
- 6 P.M. REGULAR INFORMAL DINNER at the Union. Tickets twenty-five cents, from Mr. Powers.

## TUESDAY, DECEMBER 15.

- 4-30 P.M. GEOLOGY LECTURE. Third of the series being given by Dean Shaler.
- 8 P.M. ELECTRICAL ENGINEERING SOCIETY Smoker at the Union. Dr. Pritchett will speak on his experiences while in Germany.

## WEDNESDAY, DECEMBER 16.

- 7 P.M. Y. M. C. A. MEETING, 240 West Newton Street.
- 8 P.M. CLASS OF 1898 REUNION at the Union.

## THURSDAY, DECEMBER 17.

- 12 M. CHRISTMAS TECH placed on sale in Rogers Corridor.
- 4-15 P.M. GYMNASIUM CONTEST. Putting Sixteen-pound Shot. One point for each four inches over twenty-nine feet.
- 4-30 P.M. GEOLOGY LECTURE. Fourth and last of the series being given by Dean Shaler.

## FRIDAY, DECEMBER 18.

- 8 P.M. AMERICAN CHEMICAL SOCIETY Meeting at the Union.
- 8 P.M. M. I. T. GLEE, BANJO, AND MANDOLIN CLUBS Annual Winter Concert and Dance, New Century Building, Huntington Avenue. Tickets for concert fifty cents, for concert and dance one dollar.

## Electrical Engineering Society.

Tuesday evening, Dec. 15, President Pritchett will address the Electrical Engineering Society at a Smoker to be held at Tech Union. President Pritchett will give an account of his recent trip abroad, and will undoubtedly give the Society a most valuable and interesting account of the Berlin-Zosser high-speed railroad.

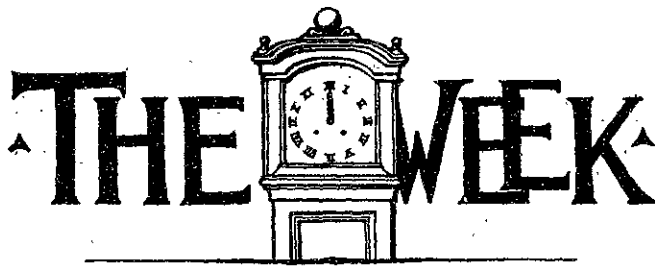
An account of last evening's meeting will be given in the issue of next week.



Mr. Irving's *Dante* was obviously a concession to popular demand for novelty, to the actor's resemblance to the poet, and to his long acknowledged mastery of stage craft. The play was entirely melodramatic and an unscrupulous travesty of the historic character; but the stage business—particularly of the *Inferno*—was delightful, both for scenic beauty and for its amazing dexterity.

The matter of staging Shakspeare is at the moment interesting, when, in London, especial treatment of the historical plays adapts them to modern theatrical pageantry, much as Mr. Mansfield adorned his *Henry V.*; and, here in Boston we have seen the highly developed ingenuity of the modern stage realize so brilliantly the fairy world of the *Midsummer Night's Dream*. What way of playing him is fairest to Shakspeare? Now and then the plays are given, as nearly as may be, as the Elizabethan companies gave them, without scenery, on the bare projecting platform; and such performances are exceedingly interesting, because such a realization of the conditions Shakspeare worked in throws much light on matters otherwise puzzling in his plays. But successfully as we may reproduce a Shakspearean stage, we cannot reproduce the Shakspearean audience, and these performances, though interesting, always seem queer enough to our modern point of view to distract our attention from the play to the circumstances of the performance. Correspondingly, of the modern spectacular productions, it is delightful to see effects of scenery and costume as beautiful as we can make them, illustrative of Shakspeare text; but the play is ultimately the thing. So the justest kind of presentation seems to be that, for instance, of Mr. Irving's *Merchant of Venice*, elaborated with all the care and elegance we can spend—familiar to our audiences in the use of finished scenery and historically accurate costume, but never elaborated into a "show" at the expense of the play, never obscuring the power of the dramatist or the faithful service of the actors who render the parts.





## NATIONAL.

The most important event of the past week was the sending of the President's message to Congress, on Monday, Dec. 7. About one-fourth of the message deals with a compact and powerful justification of his action on the Panama Canal matter. He shows that revolutionary proceedings had occurred often and that the government of the Columbia had been unable to put them down. "Under such circumstances," he says, "the government of the United States would have been guilty of folly and weakness amounting in their sum to a crime if it had acted otherwise than it did." Other recommendations in the message are, an appropriation for the enforcement of the anti-trust laws, and for the prosecution of offenders against the government, especially in postal and land frauds. The President declares that labor and capital should be kept within bounds and expresses his belief in the right of a worker to dispose of his labor in any lawful way that he may choose. He recommends the establishment of a commission to investigate the decline of merchant marine, and says that naturalization abuses must be stamped out.

The first regular session of the Fifty-eighth Congress began at noon Monday, the extraordinary session merging directly into it. The result of this are some complications as to the effect on appointments, as to whether or not they are recess appointments. Most interest is taken in the appointments of Wood and Crum.

The President has appointed a commission to consider all the land laws of the United States, with the object of the codification of the statutes now on the books and a general rearrangement to fit the conditions. Great power has been given to the board.

Governor Odell appears to be the leader of the Republican party in New York and Senator Platt no longer leads the organization. This is shown by

the fact that Bruce, the senator's president of the Republican County Committee has been forced out, and that Dunn, his chairman of the State Committee, will probably go next spring.

Governor Peabody of Colorado has issued a proclamation declaring Cripple Creek under martial law and suspending the writ of habeas corpus. He declares that the gold camp is in a state of insurrection and rebellion, and that the civil authorities are powerless. A censorship of the press has been established.

Sir Henry Mortimer Durand, the successor of Sir Michael Henry Herbert as the ambassador of Great Britain to the United States, has presented his credentials and has been formally received by President Roosevelt.

## FOREIGN.

The Canal Treaty has been ratified by the Panama Junta and has been transmitted to the United States Senate. The new Republic has been recognized by Germany and by Russia, and Denmark is about to follow.

Minister Powell in San Domingo has informed General Morales, president of the provisional government, that the United States could only recognize the provisional government when it agreed strictly to observe all the engagements with it entered into by former governments.

The Spanish cabinet has resigned, owing to the Republican opposition to the passage of the budget bill.

The growth of population in Germany for 1902, was 902,312 or 15.61 per 1,000—the greatest known.

## GENERAL.

Owing to financial difficulties Zion City, Ill., has been placed in the hands of receivers. These difficulties have increased rapidly since the failure of Dowie's New York crusade. His factories were not doing well and his followers did not respond to his appeal for aid. Zion City was founded about two years ago as the headquarters for Dowie's Church, and has a population of about 10,000. Dowie is taking steps to settle with all immediate creditors, arrange with others on a time basis and end the receivership.

A counterfeiting plant in Revere was raided this week, and three men were arrested, including John Davis, who is regarded as the most skillful counterfeiter in the world. This is the most important capture of counterfeiters ever made in this country.

The submarine torpedo boat *Moccasin* went ashore during the storm of last Friday on Currituck Beach, Va. Although she is tight and in good condition, the navy department tugs draw too much water to get near enough to the beach to work on her, and some wrecking company will probably save the vessel.

J. J. Hogan, Jr., has been elected captain of the Yale football team for next year.

#### Mechanical Engineering Society.

Last Saturday afternoon thirty-five members of the Mechanical Engineering Society enjoyed a trip to the Charles River Boiler Works. The processes in the construction of a steam boiler were of especial interest to the Seniors, who are revelling in steam nozzles and stay rods in machine design.

Trips are planned to the Main Drainage Station and to the Fore River Engine Works.

#### Musical Clubs.

The plan of the Musical Clubs to give concerts, followed by short dances, during the winter, will be tried on Friday, Dec. 18. A concert and dance similar to the one held during Junior Week will then be given in the New Century Building. Dancing will begin at about half past nine, when it is expected the concert will be over. The music of the Clubs will be new, an attractive program and dance order has been arranged, and the Clubs have promised to furnish good dance music, so everybody is assured a good time. The price of admission will be fifty cents for the concert alone, or one dollar for the concert and dance. As the decision of the Clubs to continue the plan rests on this trial, all Tech men and others who are interested are urged to attend, and help make it a success.

#### Faculty Notices.

##### CANDIDATES FOR GRADUATION.

Provisional status memoranda have been sent to all fourth-year students who are understood to be candidates for graduation the present year, except as requirements had been already defined by special vote. Any other students who expect consideration as candidates for graduation should consult the secretary as soon as possible.

##### DYNAMICS OF MACHINES.

An examination in Dynamics of Machines will be held on Saturday, Dec. 12, at 1.30 P.M., in Room 30, Engineering A.

#### Geology Journal Club.

At the meeting of the Geology Journal Club held Dec. 9, the following papers were read: L. T. Buell, "The Tin Deposits of the Malay Peninsular"; P. M. Paine, "The Laurentian Peneplain"; Prof. W. H. Niles, "The Life of Joseph Le Conte"; H. A. Buff, "Conditions in the Pennsylvania Anthracite Region."

The next meeting will be held Dec. 16, and these papers will be read: B. L. Johnson, "Some Montana Coal Fields"; J. T. Glidden, "Sources of Lead Product of the United States"; U. S. Whittemore, "Cobalt Mining in New Caledonia"; W. L. Spalding, "The Ore Deposits of Tonopah, Nevada."

#### Chess Club.

At a meeting of the Chess Club on Friday, Dec. 4., it was voted to join the Metropolitan Chess League, thus giving Tech a regular schedule of games with the other members of the League, including the Harvard Chess Club. The first match with Harvard will be played on Friday evening, Dec. 11, either at the Harvard Union or at the Boston Chess Club, the definite place to be announced later. The following men must report for the match: Lourie, Edmonds, Hill, Moray, Merwin, Helpern, Niditch and Lord.

### Technique Art Notice.

The *Technique* Board will be glad to give one copy of *Technique 1905* to every man who has either one full page drawing, or four headings accepted for publication. This offer is made to all Tech men and is not intended to pay a man for his work, but simply to show the appreciation of the Board for his drawing.

All drawings must be handed in on or before Dec. 30, 1903. Drawings must be done in the following ways: pen-and-ink, wash, or charcoal. They should be large enough to allow a reduction of at least two-thirds for publication. The *Technique* page will be seven and one-fourth inches wide by nine and one-quarter inches long.

The subjects for the drawings will be about the same as in former issues. To avoid unnecessary duplication one of the following men should be consulted in regard to subjects: J. M. Lambie, E. T. Steel, 2d, and W. Green.

Competition for Cover Design. A prize of ten dollars is offered for the best cover design for *Technique 1905*, submitted before Dec. 31, 1903.

The cover will be nine and three-eighths inches long by seven and three-eighths inches wide.

Designs must be simple.

For further information consult: J. M. Lambie, W. Green, E. T. Steel, 2d.

### The Hockey Team.

It is doubtful whether the Institute has ever had better material for a hockey team than it has this year. Thirty candidates have handed in their names, many of whom have had experience either on their Prep. school teams or at other colleges. Practice so far has been at Hammonds Pond, which is a good place but a little far off. The Hockey Association is making strong efforts to arrange for the flooding of a lot somewhere near the Institute. One of the chief difficulties in this plan is the

lack of funds. The team last year, with chance for almost no practice, succeeded in holding down Harvard, so that it was only beaten 5 to 4. This year we have several of the old men back, and some excellent new material. If the fellows in the Institute will each subscribe a little we can have a rink and turn out a team which will compare favorably with the other colleges.

The following men are candidates for the team:

W. A. Beaton, '04, H. P. Carruth, '06, W. D. Chandler, '04, H. R. Cobb, L. D. Davenport, '07, L. A. Dickinson, '07, H. R. Draper, '07, J. E. Freeman, '05, G. S. Gould, '07, H. M. Holcombe, '04, E. O. Hiller, '04, H. G. Kann, '07, H. Luttrell, '07, E. H. Marsh, '07, K. Major, '07, W. Milne, '07, R. W. Morse, '05, F. E. Payne, '05, H. O. Pope, '07, W. A. Redding, '06, J. Reyburn, A. M. Read, G. H. Rodd, '07, B. K. Sharp, '07, N. L. Snow, '07, H. G. Simpson, '04, C. G. Trauerman, '07, M. E. Vinton, '06, J. E. White, H. S. Wilkins.

### Tech House.

Tech House clubs and classes are forming almost daily. About thirty groups are under way now and several more will presently be in operation. Not nearly all of the volunteers have been put to work as yet; indeed, several weeks may elapse before the elaborate and somewhat ponderous machinery of the settlement is entirely in running order. There is work for every man who has the interest and the willingness to give an afternoon or an evening a week to the work, and it is increasingly apparent how much more the men who are going out to Roxbury are getting than giving. The experiences are new, but their realness appeals to Tech men.

After Christmas it is proposed to begin an investigation concerning juvenile employment in that section of Boston. By a careful approach to this task it is felt that some results may be obtained that will be of value to students and lawmakers. The first essential to any remedial effort is comprehensive, concrete knowledge. The men on the spot, the men who are coming into natural, friendly relations with the people of the neighborhood, are the ones best fitted to ascertain the actual conditions of the life and work of juvenile workers, and to suggest to what extent the school age limits should be raised and the working hours restricted. Tech House offers splendid opportunities for useful work to men of serious interests.



The drawings for *Technique* are due on Dec. 30.

A Tech calendar is to be issued this year, B. E. Gechler being the artist.

The names for the catalogue have been posted, and any corrections should be left at the office at once.

Mr. James P. Munroe, president of the Technology Club, has been elected president of the Reform Club of Boston.

Commander Robert E. Peary gave a talk in Huntington Hall, last week, on his recent attempt to reach the North Pole.

General indoor athletic training for the Indoor Meet, Jan. 7, began at the Gymnasium last Tuesday afternoon.

Mr. C. H. Robinson, Harvard, '04, will be at the gymnasium every Tuesday, at 4 P.M., to coach candidates for the shot-put, beginning Tuesday, Dec. 8.

Prof. Percival Lowell, non-resident professor of astronomy, has returned to Boston after a long absence in Arizona, where he has been making astronomical researches.

Messrs. Helpen and Lourie of the Chess Club played against Jacques Mieses, the German chess expert, at the B. A. A. gymnasium last week, but they were unable to win.

The Pipe and Cane Committee of the Class of 1906 have posted on one of the bulletin boards by the "Cage" four sample pipes. Every 1906 man should look at them, decide on one, and remember the number.

At the last meeting of the Exeter Club on Dec. 3, a committee was appointed, con-

sisting of Messrs. Marx, Robbe and Frank, to submit designs for a shingle. It is intended by the members to have a Smoker very soon after the Christmas holidays.

The Fencing Team has finally been recognized by the Institute Committee as a Technology team. This is a great satisfaction to the members of the Fencing Association who have worked hard and deserve some recognition. Contests are being arranged with neighboring colleges.

A number of students attended the lecture on "Radium" given in the Brookline Town Hall last Tuesday evening. The lecture was by Prof. William J. Hammer, and was a complete description of the phenomena of radioactivity. Many interesting slides were shown.

### The Christmas Tech.

It has been the custom in past years to issue special numbers before the holidays and at Junior week. This year will be no exception, for the special Christmas number, as now planned, will surpass in amount of interesting matter and in general excellence of arrangement, any number which has yet appeared. The special cover will be extremely attractive in design, being specially drawn in advance; the articles by Professor Bates and Professor Tyler will be an interesting variation from our custom of publishing simply undergraduate work. They will be on subjects sufficiently general to be of extreme interest to every student in the Institute. It is our purpose to publish a magazine which will be better than anything of the sort ever seen here before. In order to cover the cost of publishing so artistic and elegant an issue, it has been necessary to advance the price to ten cents. To subscribers it will be supplied at the regular price. The obvious deduction is the value of subscribing at the beginning of the year, and saving the extra cost on special issues. Subscribers should be careful to get their paper early, for on so expensive an issue a large excess cannot be ordered from the printer.



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# THEATRE ATTRactions



Week commencing December 7, 1903.

**Tremont Theatre.**—Fourth big week of Blanche Bates in "The Darling of the Gods," a drama of Old Japan, by David Belasco and John Luther Long, direct from its run of two seasons at the Belasco Theatre, New York. A superb cast of more than one hundred people. Matinees Wednesday and Saturday.

**Colonial Theatre.**—Last week of Henry Irving and his company in repertoire. "Waterloo and The Bells," Monday and Thursday evenings; "Louis XI.," Tuesday and Saturday evenings; "The Merchant of Venice," Wednesday and Friday evenings, also Saturday matinee.

**Majestic Theatre.**—Last week but one of "The Earl of Pawtucket," with Lawrance D'Orsay and a cast of exceptional merit. This play has met with a great success during its engagement here, and every one who has not yet seen it should do so. Matinees Wednesday and Saturday at 2.

**Hollis Street Theatre.**—Last week of Ethel Barrymore in the greatest success of her stage career, "Cousin Kate." Same cast and production as seen during Miss Barrymore's successful run at the New

Hudson Theatre, New York. Next week, E. H. Sothern in "The Proud Prince."

**Globe Theatre.**—Second week of the musical comedy, "An English Daisy," with an all star cast, including John C. Rice, Christie MacDonald, and Charles Bigelow. A new production made by Weber & Fields, which has set Boston aflame with enthusiasm.

**Park Theatre.**—Second week of the English musical comedy, "My Lady Molly," by the authors of "San Toy," "The Geisha," etc. This play is not up to the standard of modern musical comedies, and is far inferior to the other plays written by the same authors.

**Columbia Theatre.**—Second and last week of the merry musical play written by H. B. Smith, "A Girl from Dixie," with Irene Bentley and a superb cast of comedians and singers. Wednesday and Saturday matinees at popular prices. Coming, Charles H. Evans and Charles Hopper in "There and Back," with Vesta Tilley.

**Castle Square Theatre.**—"The Unforeseen" is being presented this week at this playhouse. Next week, "The Octoroon."

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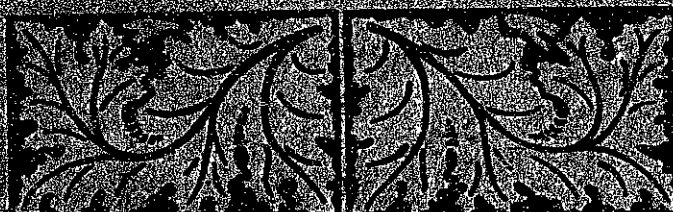
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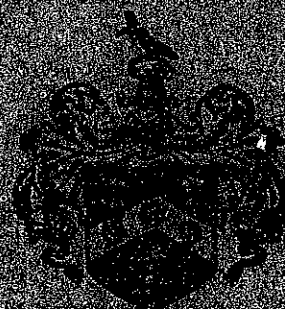
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